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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/879,939	06/14/2001	Barry Ding Ken Mark	TR-025	4431
29382	7590	02/08/2005	EXAMINER	
TROPIC NETWORKS INC. DR. VICTORIA DONNELLY 135 MICHAEL COWPLAND DRIVE KANATA, ON K2M 2E9 CANADA			PHAM, BRENDA H	
			ART UNIT	PAPER NUMBER
			2664	

DATE MAILED: 02/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/879,939

Applicant(s) AK

MARK ET AL

Examiner

Brenda Pham

Art Unit

2664

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 12 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-10 and 18-28 is/are allowed.
- 6) ☐ Claim(s) 11-13 is/are rejected.
- 7) ☐ Claim(s) 14-17 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/12/2001</u> . | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. Claims 1-28 have been examined.

#### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over ENG et al (US 5,610,904).

Claim 11, ENG et al disclose a switching node of a communication network for routing traffic between near end and far end data terminal, comprising (referring to figure 9): a plurality of input ports and output ports; a link aggregation interface for assigning an input port and a corresponding output port to a physical route between said near end and said far end data terminals under supervision of a node controller (915); and a switch for routing traffic between said input port and said corresponding output port according to a connectivity map (table 4 show a connectivity map in a form of routing table) and establishing communication between said near end and said for end data terminals along a logical link, **{a switching fabric for receiving said packet from one of said input ports and for directing said packet to another of said**

**packet switches, via one of said output ports, based on said address of said router table (column 12, lines 37-41).**

Although ENG et al does not teach each port having specified traffic parameters, the making and using of switching fabric is well known in the art and that an ATM switch having a plurality of input-ports and a plurality of output ports that allowing a plurality of priority levels is well known.

Therefore, it would have been obvious to those having ordinary skill in the art at the time of the invention was made to fabricated a switching fabric in a myriad number of ways, including each port having specified traffic parameters.

Claim 12, as explained in the rejection statement of claim 11 (parent claim), ENG et al discloses all the claim limitations recited in claim 11.

Although ENG et al does not teach wherein said link aggregation interface updates said connectivity map with information on said physical route, it is well known that when link failure occur in the network, the switching fabric reroute the switching information through another path to their destination. Therefore updating their associated routing table to include the change in the network accordingly, would have been obvious to those having ordinary skill in the art at the time of the invention was made.

Art Unit: 2664

4. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over ENG et al (US 5,610,904) in view of HSING et al (US 6,167,025).

Claim 13, as explained in the rejection statement of claim 11 (parent claim), ENG et al discloses all the claim limitations recited in claim 11.

ENG et al does not teach a switching node as claimed in claim 11, further comprising means for failure detection.

HSING et al, in the same field of endeavor, teach this claim limitation (see figure 2, element 214).

**{According to column 10, lines 58-61, HSING et al teach that the failure detection routine 214 is responsible for monitoring the status of the links between the ATM switch 200 and other switches coupled thereto to detect node and/or link failures.}**

Therefore, it would have been obvious to fabricate a switching of ENG et al, including failure detection, such as that taught by HSING et al.

***Allowable Subject Matter***

5. Claims 1-10 and 18-28 are allowed over prior art.

6. Claims 14-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 2664

7. The following is a statement of reasons for the indication of allowable subject matter: the prior art made of record does not teach or fairly suggest in combination wherein said means for failure detection monitors said input port and generates a fault indication whenever said physical route is interrupted upstream from said switching node.

The prior art fails to teach in combination a system for connecting link aggregation compatible devices and method comprising steps of receiving a request to establish a connection between said devices, said connection being defined by specific traffic parameter; detecting a plurality of maximally disjoint paths between said devices, said maximally disjoint paths being formed by compatible physical links; and establishing said connection over two or more logical links along a respective two or more maximum disjoint paths and aggregating said logical links into a virtual path having said specific traffic parameters.

### ***Conclusion***

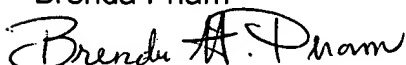
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brenda Pham whose telephone number is (571) 272-3135. The examiner can normally be reached on Monday-Friday from 9:00 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin, can be reached on (571) 272-3134.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-2600.

November 12, 2004

Brenda Pham

A handwritten signature in cursive script that reads "Brenda A. Pham". The signature is written in dark ink and is positioned below the printed name "Brenda Pham".